

CATALINA HUTTON'S VIREO (*Vireo huttoni unitti*)

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Criteria Scores

Population Trend	Range Trend	Population Size	Range Size	Endemism	Population Concentration	Threats
5	5	10	10	10	10	0

Special Concern Priority

Currently considered a Bird Species of Special Concern (year round), Priority 2. Not included on any previous list.

Breeding Bird Survey Statistics for California

Data inadequate for trend assessment (Sauer et al. 2000). Nevertheless, breeding bird survey data are one of only two sources of numerical information on the subspecies' abundance. Results are as follows: 1988, 2; 1989, 5; 1990, 1; 1991, 3; 1992, 1; 1993, 4; 1994, 3, 1995-1996, no data; 1997, 4; 1998, 0.

General Range and Abundance

Vireo huttoni unitti is endemic to Santa Catalina Island. The subspecies, described by Rea in 1991, differs from other subspecies of Hutton's Vireo by its darker plumage throughout, evidently due to a heavier deposition of melanin pigment, in parallel to two other subspecies characteristic of the Channel Islands, *Eremophila alpestris insularis* and *Vermivora celata sordida*. The subspecies was not recognized until after the collection of specimens in 1989 and 1990 because of the paucity and poor condition of earlier specimens. Specimens from Santa Cruz Island suggest no intermediacy between *unitti* and nominate *huttoni* of coastal Santa Barbara County.

Seasonal Status in California

Hutton's Vireo is a sedentary resident on Santa Catalina Island.

Historical Range and Abundance in California

Howell (1917) identified Hutton's Vireo only as "present" on Santa Catalina and cited only one specimen collected by Frank Stephens in August 1886. A. M. Rea (pers. comm.) was able to locate in museums only four specimens collected before 1989. The scarcity of early specimens from the island implies that Hutton's Vireo was never common there, perhaps never more numerous in historic time than currently. Goats had been on the island since the early 1800s, however, degrading it well before it was investigated biologically.

Recent Range and Abundance in California

The subspecies endemic to Santa Catalina Island has not been collected elsewhere. A specimen of a vagrant Hutton's Vireo on San Nicolas Island is nominate *huttoni* from the mainland (pers. obs.).

Jones and Gay (1989) called the Hutton's Vireo "fairly common" on Santa Catalina, but results of breeding bird surveys suggest the numbers of Hutton's Vireo on the island are lower than those of all other Channel Islands endemics except the Loggerhead Shrike (*Lanius ludovicianus anthonyi*).

The only other source of numerical data on Hutton's Vireo on Santa Catalina Island comes from the Christmas Bird Count, whose results are as follows: 1988, 1; 1989, 2; 1990, 7; 1991, 0; 1992, 0; 1993, 4; 1994, 3; 1995, 1; 1996, recorded in count week but not on count day; 1997, 5; 1998, 2; 1999, 1; 2000, 1.

The 1975 vegetation map (see www.catalinaconservancy.org) suggests that no more than 25% of the island's 76 square miles are covered with woodland and chaparral habitats suitable for Hutton's Vireo—most of the island is sage scrub and grassland. Population densities of Hutton's Vireo in chaparral in the Santa Monica Mountains and on Santa Cruz Island have been reported as 2.4 and 8.8 pairs per 40 hectares, respectively (Davis 1995). If these densities are extrapolated to 25% of the area of Santa Catalina Island, the population of *Vireo huttoni unitti* is 292 to 1070 pairs. Davis (1995) suggested that the population density in woodlands is higher (14 pairs per 40 hectares in riparian woodland along the Kern River; 15.6 pairs per 40 hectares in live oak woodland in

Sonoma County), and comparable habitats exist on Santa Catalina: *Quercus tomentella* “forming an almost continuous forest of large trees to 60 and 70 ft. tall and 2 ft. DBH along one of the main forks of Gallagher Canyon” and “an open woodland of groves of *Quercus chrysolepis* and *Q. tomentella*” on the south and west slopes of Mt. Orizaba (Thorne 1967).

Ecological Requirements

Jones and Gay (1989) identified both chaparral and oak woodland as habitat for Hutton’s Vireo on Santa Catalina. Rea (1991) specified “in or around oaks in mixed woodlands.” Because the island scrub oak *Quercus pacifica* is “the most abundant shrub or small tree” in the island’s chaparral (Thorne 1967), the distinction between chaparral and oak woodland on Santa Catalina is not sharp. On the island, Hutton’s Vireos may be seen in semiopen stands of oaks no more than 6 feet high as well as in denser, taller woodlands (pers. obs.).

Threats

The primary threat to *Vireo huttoni unitti*, as it is for many of the Channel Islands’ endemic birds, is habitat degradation by introduced herbivores: goats, bison, mule deer, and pigs. Browsing and soil disturbance inhibit regeneration of trees and shrubs. Soil erosion follows, precluding natural regeneration. Fortunately, the Catalina Conservancy’s efforts to remove goats and pigs from Santa Catalina Island are nearing completion, and elimination of these animals should lead to substantial recovery and spread of woodland. As of April 2000, 277 bison remained on the island.

Fires on Santa Catalina could consume oak woodland quickly and may become more likely as vegetation recovers, following the removal of feral ungulates. The disastrous effects of frequent fires on the Channel Islands are exemplified by San Clemente.

A slow but so far unexplained dying off of *Quercus pacifica*, first noticed in 1995 (Knapp 2001), could pose a threat to Hutton’s Vireo on Santa Catalina.

Management and Research Recommendations

- Support the Catalina Conservancy's programs to eradicate feral mammals from Santa Catalina Island.
- Support the Catalina Conservancy's efforts to monitor and investigate the health of oaks on Santa Catalina Island.
- Support the Catalina Conservancy's efforts to halt and reverse soil erosion on Santa Catalina Island (such as its program of placing discarded Christmas trees in eroded gullies).
- Investigate the habitat use of Hutton's Vireo on Santa Catalina: preference for various types and densities of woodlands.
- Identify areas where the subspecies' population is concentrated.
- Institute population monitoring that focuses on these core areas.

Monitoring Needs

Although Hutton's Vireo is usually detected on the Breeding Bird Surveys and Christmas Bird Counts currently run on Santa Catalina Island, the low numbers recorded suggest the species is not being surveyed adequately or efficiently by these means. Counts, transects, or spot mapping that entail surveys on foot through various types of oak woodland on the island are needed if the population's size and trends are to be known with any level of accuracy.

Acknowledgments

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